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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,699	11/01/2000	Craig L. DeCaluwe	2000-0020	2821

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EXAMINER

SCHEIBEL, ROBERT C

ART UNIT	PAPER NUMBER
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2666

2

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,699

Applicant(s)

DECALUWE ET AL.

Examiner

Robert C. Scheibel

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 8 recites the limitation "said step of selectively inhibiting" in line 1. There is insufficient antecedent basis for this limitation in the claim. This rejection could be overcome by making this claim dependent upon claim 6. The remainder of this office action assumes that claim 8 depends upon claim 6.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Application No. 09/875,319 (Pub. No.: 2002/0131366 A1) by Sharp et al.

Regarding claim 1, Sharp discloses the IP data network in the Internet 18 of figure 1. Sharp discloses the first IP data switching system in the security system 200-1, the router/gateway 12, and the firewall 108 of figure 1. Note that Sharp suggests (in

Art Unit: 2666

the last sentence of paragraph 0017 on page 2) that the router/gateway and the firewall could be built directly into the security system 200-1. Sharp discloses the step of receiving a plurality of IP packets in box 301 of figure 3 as described in lines 1-3 of paragraph 0034 on page 3. Sharp discloses the step of tabulating a count of IP data packets in box 302 of figure 3. Lines 1-2 of paragraph 0035 and lines 3-5 of paragraph 0038 on page 3 indicate that a count of packets per IP address is part of the information gleaned from each packet in box 302. The step of storing the count is disclosed in box 303 of figure 3 and indicated in line 5 of paragraph 0034 on page 3.

Regarding claim 2, the step of reading the count is disclosed in the flooding analysis 304 of figure 3. This analysis uses the information stored in the database 19, so it must therefore be read. The step of selectively discarding IP packets is disclosed in lines 1-3 of paragraph 0038 on page 3.

Regarding claim 3, the IP data switching system (as stated regarding claim 1 above) is the combination of the security system 200-1, the router/gateway 12, and the firewall 108; this is clearly an IP data router switching system.

Regarding claim 4, the limitation that the selectively discarding step includes determining if a count is above a threshold value is disclosed by Sharp. Lines 3-6 of paragraph 0007 and lines 6-9 of paragraph 0008 on page 1 indicate that the count of packets per IP address is compared to a threshold. Step 305 of figure 3 is the point at which the threshold comparison is made, and lines 1-3 of paragraph 0038 on page 3 indicates that a threshold violation triggers the process of disallowing packets to pass through the system.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 09/875,319 (Pub. No.: 2002/0131366 A1) by Sharp et al in view of U.S. Patent 5,835,710 to Nagami et al.

Regarding claim 5, Sharp discloses the IP data network in the Internet 18 of figure 1. Sharp discloses the first IP data switching system in the security system 200-1, the router/gateway 12, and the firewall 108 of figure 1. Note that Sharp suggests (in the last sentence of paragraph 0017 on page 2) that the router/gateway and the firewall could be built directly into the security system 200-1. The second IP data switching system is another router/gateway similar to the first IP data switching system in the

Internet 18. Sharp discloses the step of sending a plurality of IP packets in box 301 of figure 3 as described in lines 1-3 of paragraph 0034 on page 3; this box describes the receipt of packets in one of the two switching systems, implying that the other switching system sent the packets. Sharp discloses the step of tabulating a count of IP data packets in box 302 of figure 3. Lines 1-2 of paragraph 0035 and lines 3-5 of paragraph 0038 on page 3 indicate that a count of packets per IP address is part of the information gleaned from each packet in box 302. The step of storing the count is disclosed in box 303 of figure 3 and indicated in line 5 of paragraph 0034 on page 3.

Sharp does not disclose expressly the limitation of the count being based on a destination address.

Nagami discloses a count of packets based on the destination address in the packet count of Figure 18E. Sharp and Nagami are analogous art because they are from the same field of endeavor of packet routing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the count of Sharp to also be associated with the destination address. The motivation for doing so would have been to assist the router in setting up bypass pipes in a manner similar to Nagami to connect the Internet 18 (of Sharp) with the Intranet 13 (also of Sharp). Therefore, it would have been obvious to combine Nagami with Sharp for the purpose of setting up bypass pipes to obtain the invention as specified in claim 5.

Regarding claim 6, Sharp discloses the step of reading the count in the flooding analysis 304 of figure 3. This analysis uses the information stored in the database 19, so it must therefore be read. The step of selectively inhibiting IP packets when the

number of packets exceeds a predetermined number is disclosed by Sharp in lines 1-3 of paragraph 0038 on page 3.

Regarding claim 7, the IP data switching system (as stated regarding claim 1 above) is the combination of the security system 200-1, the router/gateway 12, and the firewall 108; this is clearly an IP data router switching system.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 09/875,319 (Pub. No.: 2002/0131366 A1) by Sharp et al in view of U.S. Patent 5,835,710 to Nagami et al as applied to claims 5 and 6 above, and further in view of U.S. Patent 5,491,801 to Jain et al.

Sharp as modified by Nagami discloses all the features of the parent claims 5 and 6 in the rejection above. Sharp as modified by Nagami fails to disclose the limitation of claim 8 of sending a message to a specific router to inhibit the flow of packets.

Jain describes a conventional method of congestion control from line 57 of column 3 through line 5 of column 4. In this passage, Jain clearly discloses the limitation of sending a message ("source quench" or "choke" packets) to a source router as a means of inhibiting the flow of packets.

Sharp as modified by Nagami and Jain are analogous art because they are from the same field of endeavor of packet routing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the above combination of Sharp and Nagami to send a source quench packet to the source router when the threshold is crossed. The motivation for doing so would have been to stop

Art Unit: 2666

these packets as close to the source as possible; this will prevent this extra traffic from loading switching/routing devices in the path from the first to the second IP data router switching system. Therefore, it would have been obvious to combine Nagami with Sharp for the purpose of stopping these packets as close to the source as possible to obtain the invention as specified in claim 8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 703-305-9062. The examiner can normally be reached on 6:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCS 1-30-04
Robert C. Scheibel
Examiner
Art Unit 2666

Seema S. Rao
SEEMA S. RAO 2/2/04
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800